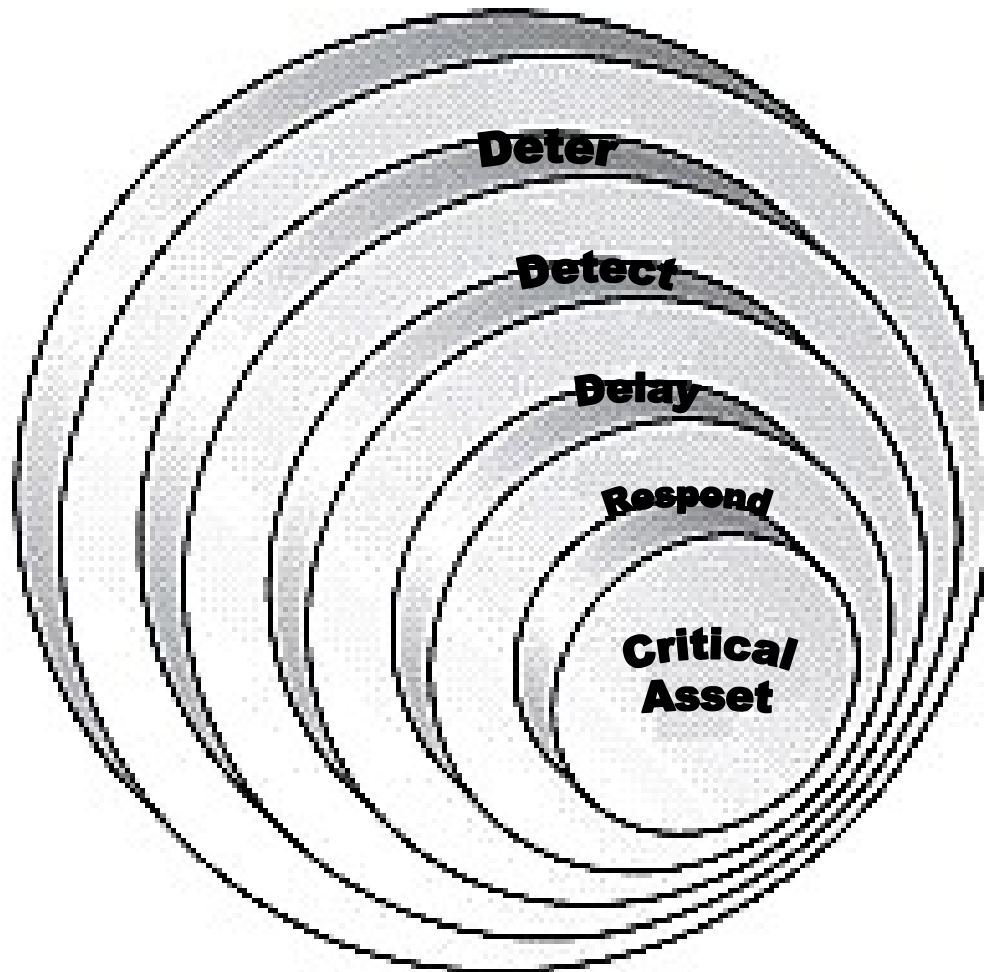# Building Security

Planning

The proper plan should be:

- Practical – fits your current structure
- Scalable – can grow over time.
- Affordable – costs do not exceed value.

Security Overview

A Vulnerability Assessment will:
- Examine the various ways an attacker might exploit vulnerable areas based on structure and use
- Allow you to develop countermeasures to an attack

Concentric Circles of Protection

Where do we begin?

At the perimeter

Perimeter Control

- Security Fencing
- Gate Control
- Emergency Call systems
- Bollards / Hydraulic barriers
- Security Planters
- ALPR

ALPR

Advance License Plate Recognition

- Optical Character Reading
  - Not the same as Video
- Data base checking
- Access Control for Gated Areas

Detect

Means of Detection

Visual

Video

Electronic Systems

Visual

Single point of entry into building

Parking lots should be situated so as to ensure a common approach to the building for all people entering the structure. A person, secretary, receptionist, guard should be positioned so as to have full view of the bank of entry doors and approaching visitors.

Video Entry

- Should be located at all entries into the building.
- Should be able to roll from one respondent station to another without restriction with audible two-way communication.
- Should be network based for additional features.
- Should have a full view of the guest via the integrated camera

Video Analytics

- Video Tracking
  - Allow authorities to track an event through out a structure to fully determine extent of the problem
  - Contrary moving traffic
- Object recognition
  - Provide information about abnormal images allowing for response prior to problem
  - A brief case with left unattended

Video Analytics

- Flame and Smoke Detection
  - Prior to other devices – more rapid response
- Shape Recognition
  - Unusual objects as compared to background images
- Dynamic Masking
  - Privacy areas where video is needed but with exception areas

Delay

Delay

- Proper building structure should sufficiently delay an intruder so that First Responders can reach the scene to minimize damage/destruction.
  - Areas of entry into building (lobbies)
  - Cafeteria openings/areas of mass gathering
  - Loading docks or other utilitarian areas

Visitor Management

- Scan to insure validity of visitors
  - Identities are verified through checks against national, local and proprietary data bases
  - Insurance in the event of court orders in custody disputes
- Can track visitors through facility
  - Insure that they are going to appropriate areas

Video ID Badging

- Pop-up photo ID
  - Identity of the badge holder is verified by a security guard.
  - Provides instant recognition that someone may not belong in the facility
  - Can be used to differentiate classes of employees.

Interior Modifications

- ## Create Areas of Isolation
  - ◦ Point of attack can be random
  - ◦ Confine/Contain attacker to area entered or interior area where attack has begun.
- ## Vestibules at all Entry Locations
  - ◦ Two sets of doors,
  - ◦ Entry into the second set is delayed until the first set is closed and locked.

Respond

Response Type

- Human:
- Traditional 911 calls to first responders can have inherent delays that may reach 5 to 7 minutes, it is like the Pony Express and is no longer functional
- Incorrect or incomplete information may be transmitted.
- Electronic:
  Can be instant through networked products and include valuable information to allow a more rapid response and quicker actions

Electronic Response

- Electronic Access Systems:
  - Provide instant notification to first responders
  - Include graphic maps of site with activation device type and location
  - Include video images of ongoing event
    No wasted effort or delay directing to point of attack.

Alert messaging

E-Blasts or Text Messages
- Sent to server for mass distribution
- Campus environments message detail
  - Issues
  - Actions

Audio/Video messages
- Devices can be campus based, or mass distribution

Response by source

Site Based – allows for immediate response to defend on premises

- Can initiate a lockdown
- Activate suppression systems to disable an attacker

First Responder based

- Immediate notifications to enable responders to arrive on Premises as soon as possible.
- Evaluate situation to determine extent

Suppression Systems

Proper system should:

- Be controlled by multiple sources
- Not affect first responders who enter the scene
- Not cause permanent harm to anyone
- Be able to disable people in an area in seconds
- Be distributed throughout a building
- Activated through video integration

Software Features

- Network based
- Mass Notification in the event of emergency
- Full Video integration with Analytics
- Graphic Mapping with device location and description
- Situation Manager
  - At least 5 definable levels

Key Control

Limited Key Distribution

- Key bypass defeats Access Control

Patent Restricted Key Systems

- Insures that mechanical keys are not duplicated
  - ◦ Keys can only be made by authorized signature
  - ◦ Eliminates unauthorized keys, secures site

Access Control: Beyond the Benefits of Saving Lives

✓ **Secure the facility, Students and Staff**

✓ Expand the usage of existing structures

  ✓ **Space utilization ratios**

✓ Expand personal freedoms

  ✓ **Tracking through facility**

✓ Channel the flow of people

  ✓ **Defining ingress and egress solutions**

✓ Cost saving solutions

  ✓ **Dramatically reduce re-keying expenses**

Conclusion

- The investment in a properly designed and secured educational facility will, when amortized over time, produce the most comprehensive and cost efficient solution to today's issues with building security.